Panel Discussion

Overcoming Barriers to Changing Landscape Behaviors

Panel Members

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Discussion Goals

- Use the Theory of Planned Behavior model to define & clarify the strength of influences that prevent individuals from acting
- Participate in a dialogue about projects and methods to overcome the challenges
- Gather project implementation strategies and model programs to incorporate into a handout document

Theory of Planned Behavior

Attitude (AT) Evaluation of the behavior based on the positive or negative beliefs related to the outcome of behavior

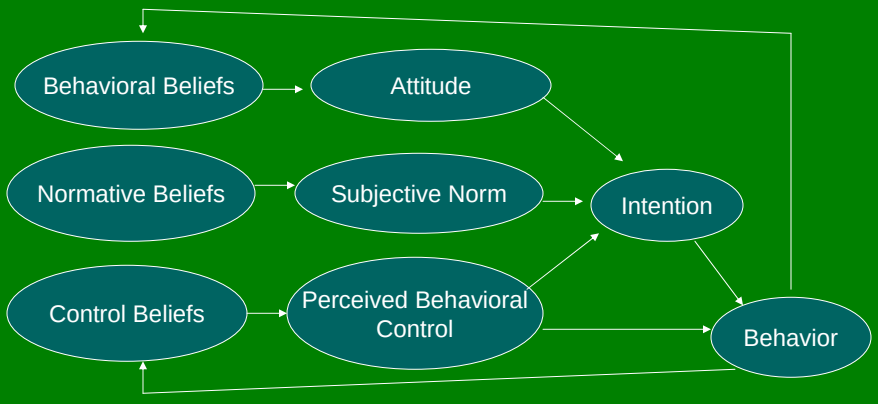
Subjective norms (SN) - Perceived social pressure regarding performance of the behavior

- Motivated by social rewards and punishments
- Motivated by the perception that others are doing the same thing

Perceived behavioral control (PBC) Perceived mental and physical abilities, willingness, and mandates that influence performance of a behavior.

Fishbein and Ajzen 1975, Ajzen 1985, Cialdini et al 1991

Theory of Planned Behavior



Intention to behave is a reasoned process influenced by attitudes, social norms, and perceptions of control (ability)

Knowledge Barriers

- Although people are willing to pay more for alternative landscape designs, adoption is impeded by…
  - Local ordinances and homeowner's association restrictions
  - Lack of knowledge about plant materials and design
  - Lack of understanding of installation or maintenance
  - Lack of adequate plant availability and knowledge

Normative Barriers

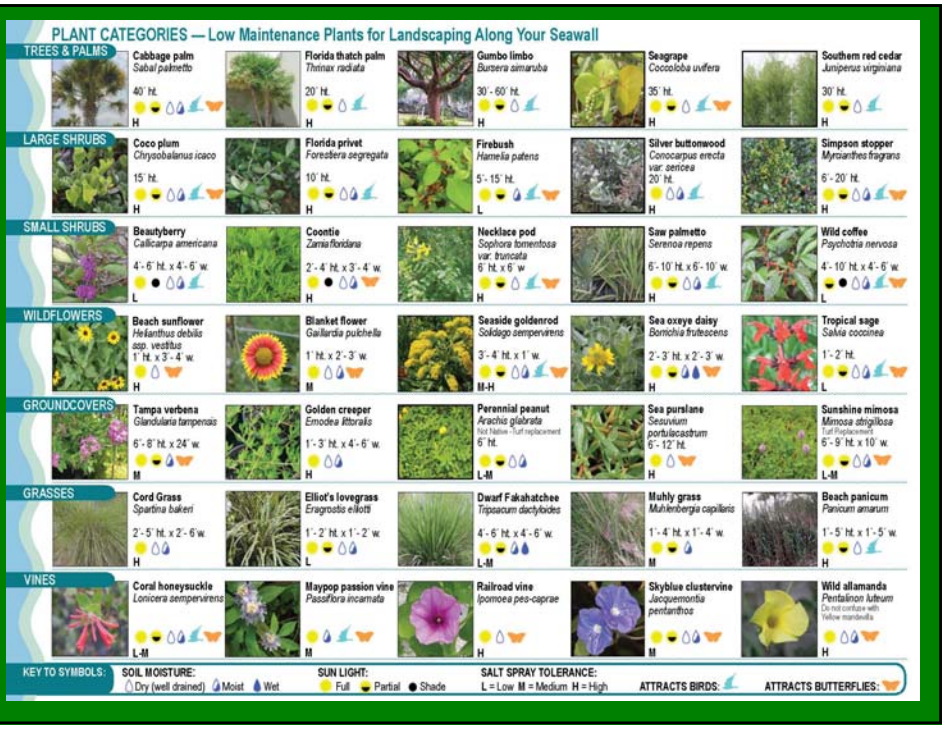
- Alternative landscape designs are rarely chosen by homeowners, owing both to consumer and community aesthetics and to the time and expense of alternatives
- Challenging the normative landscape appearance is difficult at best and in many cases, nearly impossible.
- The residential lawn as an ordered monoculture has proven nearly intractable to reform

Perceived Behavioral Control Barriers

- Knowledge
- Ability
- Mandates and policies
- Costs and market values

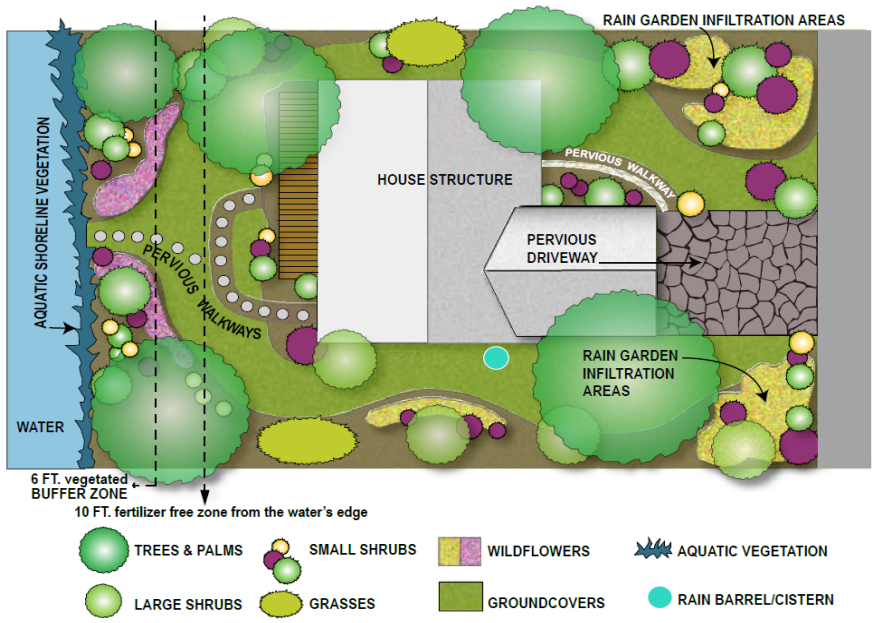
Why We Selected Barriers

- In tandem and closely linked to landscape design and aesthetics is the use of fertilizers and chemicals in residential landscape management
- Social and attitudinal influences are linked


PLANT CATEGORIES — Low Maintenance Plants for Landscaping Along Your Seawall
TREES & PALMS
Cabbage palm
Sabal palmetto
40' ht.
H
Florida thatch palm
Thrinax radiata
20' ht.
H
Gumbo limbo
Bursera simaruba
30' - 60' ht.
H
Seagrape
Coccoloba uvifera
35' ht.
H
Southern red cedar
Juniperus virginiana
30' ht.
H
LARGE SHRUBS
Coco plum
Chrysobalanus icaco
15' ht.
H
Florida privet
Forestiera segregata
10' ht.
H
Firebush
Hamelia patens
5' - 15' ht.
L
Silver buttonwood
Conocarpus erecta var. sericea
20' ht.
H
Simpson stopper
Myrcianthes fragrans
6' - 20' ht.
H
SMALL SHRUBS
Beautyberry
Callicarpa americana
4' - 6' ht. x 4' - 6' w.
L
Coontie
Zamia floridana
2' - 4' ht. x 3' - 4' w.
H
Necklace pod
Sophora tomentosa var. truncata
6' ht. x 6' w.
H
Saw palmetto
Serenoa repens
6' - 10' ht. x 6' - 10' w.
H
Wild coffee
Psychotria nervosa
4' - 10' ht. x 4' - 6' w.
L
WILDFLOWERS
Beach sunflower
Helianthus debilis asp. vestitus
1' ht. x 3' - 4' w.
H
Blanket flower
Gaillardia pulchella
1' ht. x 2' - 3' w.
M
Seaside goldenrod
Solidago sempervirens
3' - 4' ht. x 1' w.
M-H
Sea oxeye daisy
Borrichia frutescens
2' - 3' ht. x 2' - 3' w.
H
Tropical sage
Salvia coccinea
1' - 2' ht.
L
GROUNDCOVERS
Tampa verbena
Glandularia tampensis
6' - 8' ht. x 24' w.
M
Golden creeper
Emodea littoralis
1' - 3' ht. x 4' - 6' w.
H
Perennial peanut
Arachis glabrata
Not Native - Turf replacement
6' ht.
L-M
Sea purslane
Sesuvium portulacastrum
6' - 12' ht.
H
Sunshine mimosa
Mimosa strigillosa
Turf Replacement
6' - 9' ht. x 10' w.
L-M
GRASSES
Cord Grass
Spartina bakeri
2' - 5' ht. x 2' - 6' w.
H
Elliot's lovegrass
Eragrostis elliotti
1' - 2' ht. x 1' - 2' w.
L
Dwarf Fakahatchee
Tripsacum dactyloides
4' - 6' ht. x 4' - 6' w.
L-M
Muhly grass
Muhlenbergia capillaris
1' - 4' ht. x 1' - 4' w.
M
Beach panicum
Panicum amarum
1' - 5' ht. x 1' - 5' w.
H
VINES
Coral honeysuckle
Lonicera sempervirens
L-M
Maypop passion vine
Passiflora incarnata
M
Railroad vine
Ipomoea pes-caprae
H
Skyblue clustervine
Jacquemontia pentanthos
M
Wild allamanda
Pentalinon luteum
Do not confuse with Yellow mandevilla
H
KEY TO SYMBOLS:
SOIL MOISTURE:
Dry (well drained)
Moist
Wet
SUN LIGHT:
Full
Partial
Shade
SALT SPRAY TOLERANCE:
L = Low M = Medium H = High
ATTRACTS BIRDS:
ATTRACTS BUTTERFLIES:


Target Behaviors
- Change design to decrease turf and increase use of native/resource efficient plants
- Use lawn fertilizers more efficiently in residential landscapes.
- Irrigate residential landscapes more efficiently.
- Reduce the use of chemical herbicides and pesticides in the residential landscape.

Example of a Bay-Friendly Landscape



Barriers

- Appearance preferences
- Regulations
- Don't value environment
- Maintenance knowledge and perceived costs
- Implementation barriers

Barrier 1: Appearance Preferences

- Unkempt appearance, security issues, normative appeal of bright green lawn, curb appeal
- Target: Homeowners
- Type of Influence: Attitudinal, Social norm

Barrier 2: Regulations

- HOA Mandates
- Target: homeowners
- Type of Influence: Perceived control/constraint, Social Norm, Attitudinal

Barrier 3: Environmental Value

- Do not value environmental quality or biodiversity, wildlife
- Target: Homeowner
- Type of Influence: Attitudinal and Social Norm

Barrier 4: Maintenance and Costs

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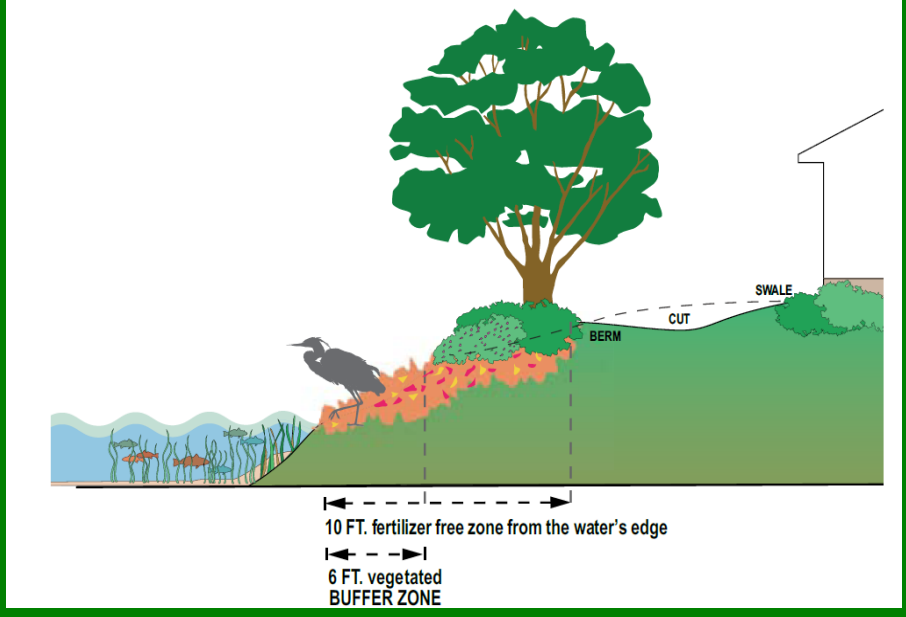
- Maintenance knowledge
- Perceived costs
- Target: homeowner and professional landscapers
- Type of Influence: knowledge, awareness, perceived control/constraint

Barrier 5: Implementation

- Design knowledge, adequate plant materials
- Target: homeowner and landscape professional
- Type of Influence: knowledge, awareness, perceived control/constraint

Potential influences on intent to behave	Target	Type of Influence on Behavioral Intention	Methods for Overcoming
Appearance preferences, (Unkempt appearance security issues, Normative appeal of bright green lawn, Curb appeal)	Homeowner	Attitudinal Social Norm	Demo, tour, designs, workshop, recognitions
Regs: HOA mandates	Homeowner	Perceived control/constraint Social Norm Attitudinal	Model mandates, Revolution
Don't value environmental quality or biodiversity, wildlife	Homeowner	Attitudinal Social Norm	Bioblitz/ecosystem workshops, recognition, IPM
Maintenance knowledge and perceived costs more	Homeowner and professional landscaper	Knowledge/awareness Perceived control/constraint	Tour, workshops, cost effectiveness information, professional training with licensing, homeowner interact with company, regulations, gardening
Implementation barriers (design knowledge, adequate plant materials)	Homeowner and professional landscape	Knowledge/awareness Perceived control/constraint	Model landscape designs, resource lists of local professionals

Earth Shaping to Prevent Runoff



Strategies to Overcome Attitudes

- Target gardeners, people who like to be in their yard
- Conduct birding and wildlife workshops
- Engage folks who value environment and biodiversity

Strategies to Overcome Norms

- Showcase
- Stewards and leaders
- “Marketplace” concepts
- Awards and recognition
- Success stories

Strategies to Overcome Knowledge and Cost

- Tie landscape actions to water quality
- How to design, plant and fund
- Cost share – grants, in-kind donations, volunteers
- Build partnerships with service providers
- Technical assistance


Questions?